

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-2. (canceled)

3. (currently amended) An appearance inspection apparatus comprising:

a memory that stores image data of an appearance of an inspection target;

a thread generator that generates k sets of n (k is a positive integer and n is an integer equal to or greater than 2) threads in each of which procedures are described for respectively processing the image data in n sub-regions obtained by dividing one inspection region on the image data stored in said memory and storing a processing result into said memory; and

a plurality of CPUs which executes said k sets of said n threads generated by said thread generator in parallel, respectively,

wherein said thread generator further generates m (m is a positive integer) threads in each of which a procedure is described for collectively processing the image data in said n sub-regions, and one of said plurality of CPUs singly executes said m threads generated by said thread generator.

4. (original) The appearance inspection apparatus according to claim 3, wherein said n and m are determined based on a kind of image processing to be executed or a size of said inspection region.

5. (original) The appearance inspection apparatus according to claim 3, wherein said n and m are determined based on a result of an actual measurement of processing times of said plurality of CPUs under an arbitrary combination of n and m.

6. (canceled)

7. (original) The appearance inspection apparatus according to claim 3, wherein in each of said n threads, the procedure is described for executing a predetermined kind of image processing and another kind of image processing in succession.

8-10. (canceled)

11. (previously presented) An appearance inspection method comprising the steps of:

storing image data of an appearance of an inspection target in a memory;

generating k sets of n (k is a positive integer and n is an integer equal to or greater than 2) threads in which procedures are described for respectively processing the image data in n sub-regions obtained by dividing one inspection region on the image data stored in said memory and storing a processing result into the memory;

executing the generated k sets of said n threads in parallel;

generating m (m is a positive integer) threads in each of which a procedure is described for collectively processing the image data in said n sub-regions; and

executing said generated m threads in serial.

12. (original) The appearance inspection method according to claim 11, wherein said n and m are determined based on a kind of image processing to be executed or a size of said inspection region.

13. (original) The appearance inspection method according to claim 11, wherein said n and m are determined based on a result of an actual measurement of processing times executed under an arbitrary combination of n and m .

14. (canceled)

15. (original) The appearance inspection method according to claim 11, wherein in each of said n threads, the procedure is described for executing a predetermined kind of image processing and another kind of image processing in succession.

16. (canceled)